

PROGRAM DETAILS

SCHEDULE	July 9 TH , 2012 through August 2 ND , 2012 Monday through Thursday 9:00 am until 1:00 pm
DESIGN	This is NOT a college unit credit program. This is a hands-on, project based program. A VEX robotics design system platform will be used. Additional activities include college and industry tours.
PURPOSE	Inspire, highlight and create awareness of career pathways, opportunities and educations spanning science, technology, engineering and math (STEM). Develop critical, creative & innovative reasoning skills. Design and build a VEX robot for class competition.
DEPARTMENTS INCLUDED	Computer Aided Design/Drafting (CADD) Electronics / Computer Technology Engineering Technology Manufacturing / Machine Tool Technology
ELIGIBILITY	No prerequisite course required for this program. Open to all El Camino College and high school students enrolled in El Camino by summer 2012.
APPLICANTS	Registration deadline: Friday June 8th, 2012. Selected students will be notified by email Friday, June 15 th 2012 (class is limited to 25 students).
COORDINATOR	Glen Chapple, email: gchapple@elcamino.edu UCLA Electrical Engineering, ECC Mathematics Alumnus
LOCATION	Technical Arts Building, Room 153 (TA153) El Camino College, Torrance, CA 90506
COST	FREE: Grant funding by HSI STEM & CTE Transitions
<p>➤ Students will learn to solve problems and develop solutions used in real-world applications found in day-to-day life and the workplace</p> <p>➤ Students will learn to understand and be able to articulate the inter-disciplinary role of STEM in Industry</p> <p>➤ The Technical Industry seeks students with hands-on experience, critical thinking skills, and good inter-personal abilities</p> <p>Are you ready to START? We are ready to start helping you!</p>	

Hurry, don't wait! Sign Up Today!! Space is limited!!!

PROGRAM OUTLINE

<p>Week 1 - July 9th to July 12th</p> <ul style="list-style-type: none"> • Introduction to robots & robot design • “Magic of Science” presentation • Science topics • Measurements, units and conversion factors • Principles of Engineering (POE) • Computer Hardware Technology • Building an “Electromagnet”
<p>Week 2 - July 16th to July 19th</p> <ul style="list-style-type: none"> • Robot construction • Introduction to Engineering Design (IED) • Computer Aided Design/Drafting (CADD) • Electronics • Computer Integrated Manufacturing (CIM) • Manufacturing Technology • Building an “Electric Telegraph”
<p>Week 3 - July 23rd to July 26th</p> <ul style="list-style-type: none"> • Robot programming • Engineering Design and Development (EDD) • Machine Tool Technology (MTT) • Engineering topics • Mathematics topics • Sustainable & renewable energy • Building an “Electric Motor”
<p>Week 4 - July 30th to August 2nd</p> <ul style="list-style-type: none"> • Robot testing • Industry speakers & tours • Tips for success in a STEM education • Power Point presentations (robot project) • Robot team competitions & awards • Presentation of certificates of completion • “The <i>START</i> Program” concluding celebration!

Visit our website at (under construction):
www.elcamino.edu/academics/indtech/STARTProgram

[Click here to apply online](#) or visit our website

Registration Deadline: Friday June 8th, 2012

[Click here to apply online](#) or visit our website

You may return this application by mail, email, or in person to:

Karen Latuner - CTE Coordinator

16007 Crenshaw Boulevard, TA104B, Torrance, California 90506

klatuner@elcamino.edu, (310) 660-3593, ext. 3782

APPLICATION		
First Name (PLEASE PRINT CLEARLY):		Last Name (PLEASE PRINT CLEARLY):
SIGNATURE (under 18 parent signature required):		
Address:		
City:		Zip Code:
Phone (Day or CELL):		Phone (Evening):
Email (PLEASE PRINT CLEARLY):		
ECC Student ID Number:		
Have you ever taken Principals of Engineering (POE), Introduction to Engineering Design (IED) or participated in a FIRST Robotics Team? YES / NO If Yes, which one(s):		
Name of High School: _____ Graduation Year: _____		
<input checked="" type="checkbox"/> Please include with your Application <i>no more than</i> a one page letter describing why you are interested in participating in this program and any career interests you may have at this time.		
Office use only: Confirmation sent Yes No		Application processed: Yes No
Revision Date: May 26 th , 2012		

The El Camino Community College District is committed to providing equal opportunity in which no person is subjected to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, physical or mental disability or retaliation.



El Camino College

Division of Industry and Technology

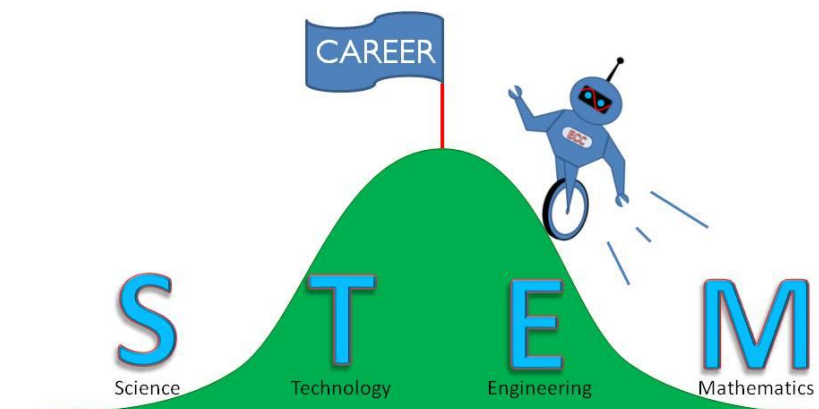
Presents

The **START** Program

STEM Training and Robotics Technology

**STEM Career Pathways
and
Robot Building Experience**

SUMMER 2012



The START Program is your start to a career in STEM